

REMARKS

Claims 60, 62, 63, 65, and 76-79 are pending in the present application. In the Office Action dated October 19, 2005 ("Office Action"), claims 60, 62, 63, 65, and 76-79 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 60, 62, 63, 65 and 76-79 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-61 of co-pending Application No. 10/155,659 in view of U.S. Patent No. U.S. 5,958,794 to Bruxvoort et al. ("Bruxvoort"). Claims 60, 62, 63, 65, and 76-79 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,903,018 in view of U.S. Patent No. 6,634,927 B1 to Molnar ("Molnar"). Claims 60, 62, 63, 65 and 76-79 were rejected under 35 U.S.C. 103(a) as being unpatentable over Molnar in view of Bruxvoort.

The Office Action asserts that Molnar discloses a planarizing machine including a support table, a polishing pad on the support table, the polishing pad having a body with a planarizing surface. The body includes a plurality of abrasive particles fixedly attached to the body at the planarizing surface. The planarizing machine further includes a carrier assembly having a carrier head configured to hold a substrate assembly and a drive mechanism attached to the carrier head to move the carrier relative to the polishing pad. The planarizing machine further includes a non-abrasive planarizing solution.

To supplement Molnar, Bruxvoort is cited for teaching a non-abrasive lubricating planarizing solution may include polyvinyl alcohols, glycerine, and POLYOX.

While Bruxvoort discloses the use of POLYOX as a lubricating solution, it does not disclose the use of a non-abrasive lubricating planarizing solution including homopolymers and copolymers of acrylic acid crosslinked with a polyalkenyl polyether (e.g., CARBOPOL®). Bruxvoort discloses that "examples of suitable lubricants include metal salts of fatty acids (e.g., zinc stearate, calcium stearate and lithium stearate), graphite, mica, molybdenum disulfide, talc, polyamides, boron nitride, sulfides, waxes, glycol ethers, glycerine, silicone compounds, polyvinyl acetate, polyvinyl alcohols, ethylene oxide polymers (e.g., polymers commercially available under the trade designation "Polyox" from Union Carbide Corp.), combinations thereof and the like." (col 13, lines 23-30).

However, it is noted that CARBOPOL® is absent from this list. There is also no genus term that would include CARBOPOL®, which includes homo- and copolymers of acrylic

acid crosslinked with a polyalkenyl polyether. Accordingly, Bruxvoort fails to disclose or fairly suggest using CARBOPOL as a non-abrasive lubricating planarizing solution.

Turning now to the claims, the patentably distinct differences between the cited references and the claim language will be specifically pointed out. Claim 60 recites, in part, “wherein the non-abrasive lubricating planarizing solution further comprises homopolymers and copolymers of acrylic acid crosslinked with a polyalkenyl polyether.” Neither Molnar nor Bruxvoort discloses or fairly suggest such limitations. As discussed above, Bruxvoort discloses POLYOX®, but fails to disclose CARBOPOL® or a non-abrasive lubricating planarizing solution including *homopolymers and copolymers of acrylic acid crosslinked with a polyalkenyl polyether*. Therefore, claim 60 is allowable over Molnar and Bruxvoort. Claims depending from claim 60 are also allowable due to depending from an allowable base claim and further in view of the additional limitations recited in the dependent claims.

In response to the obviousness-type double patenting, applicants are filing a terminal disclaimer to obviate it. Accordingly, the obviousness-type double patenting rejection should be withdrawn.

With regard to the rejection under 35 U.S.C. 112, first paragraph, the originally filed application disclosed CARBOPOL®. Previously, the specification was amended to recite the generic terminology for the products CARBOPOL® and POLYOX®. Namely, POLYOX® was replaced with the phrase ethylene oxide polymers and CARBOPOL® was replaced with the phrase homopolymers and copolymers of acrylic acid crosslinked with a polyalkenyl polyether. Accordingly, the specification includes written description support for the limitations in claim 60 that recite “wherein the non-abrasive lubricating planarizing solution further comprises homopolymers and copolymers of acrylic acid crosslinked with a polyalkenyl polyether.”

All of the claims remaining in the application are now clearly allowable.
Favorable consideration and a timely Notice of Allowance are earnestly solicited.

Respectfully submitted,

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Enclosures:

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Fee Transmittal Sheet (+ copy)

Terminal Disclaimer

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